UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/316,754	05/21/1999	SHIA-SAN GONG	AT9-98-884	8260

7590   11/13/2003

BARRY NEWBERGER
WINSTEAD, SECHREST & MINICK
100 CONGRESS AVENUE
SUITE 800
AUSTIN, TX 78701

EXAMINER
VO, LILIAN

ART UNIT	PAPER NUMBER
2127	

DATE MAILED: 11/13/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 August 2003</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-8</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-8</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>27 August 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

   a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4)☐ Interview Summary (PTO-413) Paper No(s). _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: .

DETAILED ACTION

1.   Claims 1 – 8 are presented for the examination.

Response to Arguments

2.   Applicant's arguments filed 8/27/03 have been fully considered but they are not

persuasive for the reasons set forth below.

In response to applicants' argument, page 3, 1st paragraph, by sorted categories, the

Examiner merely intend to point out the fact that Srinivasan teaches the method of storing data

under different categories by which table 4 exemplify. Table 4 has a plurality of attribute names.

All of these clearly show the step of profiling, in other words, categorizing the data to determine

whether the data should be stored in a certain table.

In response to applicants' argument, page 3, 2nd paragraph, the Examiner did not show

rational for inherency of which the data must have been profiled before the table could be created

because in its own meaning of inherency, the Examiner did not realize it was necessary to

provide the clear correlation in which one of ordinary skill in the art should realize that table of

fig. 4 could have been created without the step of profiling the data or categorizing the data by

their attributes, prior to creating the table for the storing step.

From another perspective, if the data were profiled, there would be no need to identify

the different attributes of the data for storing, much less creating the table to store them under

different attribute names. Furthermore, with respect to the claim, it is clear that merged and

overflow tables are two already known table prior to profiling the data. Therefore, there was

inherency no need to explain how the unclaimed feature of the data be profiled before the table could be created, as argued by Applicants in page 3, beginning of paragraph 2.

In contrary to Applicants' argument regarding fig. 5 not showing merged and overflow tables, the Office would like to point out that the features show by Srinivasan are defined by Applicant's specification (page 12, line 20 – page 13, line 14). In short, merged table includes single value attributes and overflow table is a set of multiple value attributes. In the reference of Srinivasan fig. 4 and 5, single value attribute can be exemplified by attribute "AttrName". In fig. 5, multiple value attributes are exemplified by those data under "AttrVal", under which some data could have more than one telephone number (row 506) or data attributes with multiple managers (row 508).

Also, since the specification indicates that each attribute can exist in both tables. Essentially, the Office may not have to provide reference for grounds of rejection, which have the profiling step of the data attributes.

With respect to Applicants' argument on page 4, line 5 – 10, again, the Office would like to recognize in inherent limitation by which searching and querying optimization directly impact the step of optimally storing of the data. Technically, "optimally storing of data" must be understood by the ways of how to store the data to make the step of storing optimally. By such, it is clear that optimal searching and querying are merely part of the steps involved in the step of optimal storage of data. The profiling step in the claim in a certain way is also considered part of making the step of storing the data optimally. Essentially, such method step is not beyond the scope of Srinivasan invention (page 1, paragraph 0002).

With respect to applicants' argument in page 5, 2nd paragraph, claim 1 specifically claims

the two distinct merged table and overflow table. Claim 2 defines single value attribute data to

be stored in merged table. Claim 3 defines multiple value attribute data to be stored in overflow

table. Since claims 2 and 3 are distinctly subcombinations and usable together of claim 1. The

tables shown by Srinivasan for each attribute may not have to further include the other attribute,

such as argued by Applicants. Therefore, the reference suffices in teaching each attribute tables

individually.

With respect to Applicants argument page 6, 2nd paragraph, the reference by Srinivasan

discloses single value attribute table and multiple value attribute table, which distinguish from

one another by obviously their values. For example, fig. 5 shows single value attribute "Last

Name" and "First Name". Also in fig 5, up to two telephone numbers or multiple managers are

example of multiple value attributes.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United
States before the invention thereof by the applicant for patent, or on an international application by another who
has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention
thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

do not apply when the reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA

35 U.S.C. 102(e)).

4.   Claims 1 – 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Srinivasan et al

(US Pat. Application 2001/0051948 A1).

Regarding **claim 1**, Srinivasan et al. disclose a method for storing data that has at least

some entries with multiple value attributes (figs. 2A – 2C and 4 – 6), comprising the steps of:

profiling the data to determine whether the data should be stored in an attribute table

(figs. 2A – 2C and 4 – 6. This inherently indicated that the data must have been profiled before

the table could be created) or, alternatively, in a merged table and an overflow table (fig. 5 and

paragraphs 0046 – 0047); and

storing the data optimally based in the profiling step (paragraph 0077, 0046 – 0047 and

fig. 4 – 5).

Regarding **claim 2**, Srinivasan et al. also disclose the method as described in claim 1

wherein the entries with single value attributes are stored in the merged table (see fig. 2C, 5 and

paragraph 0047).

Regarding **claim 3**, Srinivasan et al. also specify the method as described in claim 1,

wherein the entries with multiple value attributes are store in the overflow table (Srinivasan et al.

show the telephone number and manager catalog tables in figs. 5, 6C, and 6D, and further

disclose in paragraph 0047 of a subschema entry could identify whether an attribute type

comprises either single value, or multiple values of that attribute. Example of some entities may

have more than one telephone number are also provided).

Regarding **claim 4**, Srinivasan et al. also disclose the method as described in claim 1

wherein the overflow table is an attribute table (figs. 5, 6C, 6D show per attribute tables, which

are the overflow tables of the per attribute tables).

Regarding **claim 5**, Srinivasan et al. further show the method as described in claim1,

wherein a majority of the data is stored in the merged table and a set of additional values for the

multiple values attributes are stored in the overflow table. The figs. 2C and 5 exemplify merged

table in which the majority of the single values are stored. The multiple value attributes of the

data from the merged table are seen in figs. 6C and 6D, whose tables are shown with multiple

attributes for an instant entry of table 5 (more than one managers and/or telephones per person),

illustrate the overflow tables.

Regarding **claim 6**, Srinivasan et al. disclose the method as described in claim 1, wherein

the profiling step parses the data to identify entries with single value attributes (paragraph 0047

shows subschema entry can identify whether an attribute type comprises either single value or

multiple values. Also, the feature is considered inherent as per the rejected limitations claimed

above).

Regarding **claim 7**, Srinivasan et al. disclose the method as described in claim 1 wherein

the profiling step parses the data to identify given operations that are performed on the data once

stored (paragraphs 0011 and 0016: "... RDBMS applications are actions and operations to

manipulate the data and structures of the database").

Regarding **claim 8**, Srinivasan et al. disclose the method as described in claim 1 wherein the data is stored in a relational database backing store (abstract and paragraph 0019).

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5,963,643.

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 703-305-7864. The examiner can normally be reached on Monday - Thursday, 7:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William Grant can be reached on 703-308-1108. The fax phone number for the

organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-305-3900.

Lilian Vo
Examiner
Art Unit 2127

lv
November 6, 2003

PRIMARY EXAMINER